

PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0851-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB

Substitute	for form 1449	A/PTO			Co	mplete if Known
	INFORMATION DISCLOSURE				Application Number	
INFO	KMAII	ON DIS	SCLOSU	KE	Filing Date	
STAT	LEMEN.	T BY A	PPLICA	NT	First Named Inventor	Kia Silverbrook
		•			Art Unit	
((use as many	sheets as	necessary)		Examiner Name	
Sheet	1	of	7		Attorney Docket Number	MTB07US

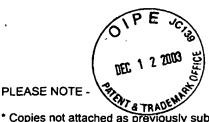
ſ			U.S. PATE	NT DOCUMENTS	
Examiner Initials		Document Number Number - Kind Code ² (If known	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
MA		us5,719,604 *	Feb 17, 1998	Inui et al	1
		∪s-5,666,141 *	Sep 09, 1997	Matoba et al	
		∪s4,672,398 *	<u>Jun 09, 1987</u>	Kuwabara et al	
	<u> </u>	us-4,737,802 *	Apr 12, 1988	Mielke	
	<u> </u>	us5,029,805 *	_Jul_09,_1991	Albarda_et_al	
	<u> </u>	us-5,258,774 *	_Nov_02,_1993.	Rogers	
	 	<u>us</u> 4,553,393.*	_Nov_19,_1985	Ruoff	
!	 -	US-4,864,824.*	_Nov_12,_1989	Gabriel-et.al	
	<u> </u>	US-4,423,401.*	-Dec-27,-1983	Mueller	
ļ		us-1,941,001 •	Jan-1929	Hansell	
<u> </u>		US 3,596;275 *	-Jul-197-1	Sweet	
		US-3-373:437-*	-Mar-1968	Sweet-et-al	
		USD 04€ 200 *	-Mar-1976	Kyser-et-al	
		us-3,683,212 *	-Aug-1972	Zoltan	
		US-3-747-120-*	-Jul-1973	Stemme	
		US-4,459,601-*	-Jul-1984	Howkins	
		US-3,747,120-* US-3,747,120-* US-4,459,601-* US-4,584,590-*	-Apr-1986	Fischbeck et al	
		US-4,490,728	-Dec-1984	Vaught et al	<u> </u>
4		US-4.899.181 *	Dec 1990	Hawkins et al	

	FOREIGN PATENT DOCUMENTS								
Examiner Initials	Cite No. ¹	Foreign Patent Document Country Code 3 - Number 4 - Kind Code 5 (Finown)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Τ,			
WW		EP 0 713 774 *	May 29, 1996	Sharp Kabushiki Kaisha	1	Г			
4		DE 195 16 997 *	Nov 16, 1995	Sharp K.K		i			
1		DÉ-196-23-620-*	-Dec-19,-1995	Sharp K:K		-			
		JP-2=108544 (Abstract) •	-Apr 20,-1990	Seiko Epson Corp		l			
		JP-2-92643-(Abstract)-*	-Apr:03;-1990	Seiko Epson Corp		⊩			
		JP-4-353458-(Abstract)-*	-Dec-08,-1992	-Brother Ind-Ltd					
		JP-6-91865 (Abstract) *	-Apr-05,-1994	Seikosha-Co-Ltd					
		JP-6-91866 (Abstract) *	Apr-05,-1994	Seikosha-Co-Ltd		<u> </u>			
		JP_2-265752.(Abstract).*	Oct.30,_1990	Matsushita.Electronic.Ir	d.Co.Ltd	_			
إسلا		EP_0.634.273	Jan_18,_1995	Sharp Kabushiki Kaisha		<u> </u>			

Examiner Signature	Date Considered 2/28/00

^{*}EXAMINER: Initial if deference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique distinct designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WiPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WiPO Standard ST. 16 if possible. Applicant is to place a check mark here if English language Translation is attached.



PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute	e for form 1449	A/PTO		Co	mplete if Known
MICO	D44471	D.		Application Number	
INFO	RMAIIC	אט אכ	SCLOSURE	Filing Date	
STAT	TEMENT	BYA	PPLICANT	First Named Inventor	Kia Silverbrook
				Art Unit	
(use as many	sheets as	necessary)	Examiner Name	
Sheet	2	of	7	Attorney Docket Number	MTB07US

			U.S. PATE	NT DOCUMENTS	
Examiner Initials	Cite No.1	Document Number Number - Kind Code ² (if known	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		us-			
		US-			***
		US-			
		us-			

ſ				FORI	EIGN PATENT D	OCUMENTS		
	xamin nitials		Cite No. 1	Foreign Patent Document Country Code 3 - Number 4 - Kind Code 9 (# Innown)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	₽
	RV	A		DE 195 32 913 * JP 58 112747 (Abstract) *	Mar 28, 1996 Jul 05, 1983	Sharp K.K Fujitsu KK	-	
	<u> </u>			DE-43-28-433 ***********************************	-Mar 02, 1995 Feb 04, 1986	-Heidleberger-Druckmasch Canon Inc.	inen:AG	
	\perp	- -		JP 01 128839 (Abstract) * JP 04 126255 (Abstract) *	May 22, 1989 Apr 27, 1992	Ricoh Co Ltd Seiko Epson Corp		_
-	+	- -		GB 2 262 152 * DE 195 16 997 *	Jun 09, 1993 Nov 16, 1995	Willett Int Ltd Sharp K:K		
	1			JP-05-318724 (Abstract *	-Dec-03,-1993 Jun.21,_1990	-Seikosha Co Ltd		
Ŀ	W	-		DE 32 45 283 * JP 04 368851 (Abstract) *	Jun 07, 1984 Dec 21, 1992	Siemens AG Seiko Epson Corp		

Examiner Date Signature Considered

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.



PLEASE NOTE -

* Copies not attached as previously submitted to or cited by the USPTO in parent applications US 10/160,273

PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0551-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB

Complete if Known Substitute for form 1449A/PTO **Application Number** INFORMATION DISCLOSURE Filing Date STATEMENT BY APPLICANT First Named Inventor Kia Silverbrook **Art Unit** (use as many sheets as necessary) **Examiner Name** of Attorney Docket Number MTB07US Sheet

			U.S. PATE	NT DOCUMENTS	
Examiner Initials		Document Number Number - Kind Code ² (If known	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US-			
		US-			
	<u> </u>	US-			
		US-			,
		US-			
		US-	- 4 A		

FOREIGN PATENT DOCUMENTS						
Examiner	Cite	Foreign Patent Document	Publication Date	Name of Patentee or	Pages, Columns, Lines,	
	No.1	Country Code 3 -Number 4 - Kind Code 5 (if known)		Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	Τ¢
. ~ A		JP 02 158348 (Abstract) *	Jun 18, 1990	Minolta Carnera Co Ltd		
MAY		JP 03 112662 (Abstract) *	May 14, 1991	Seiko Epson Corp		i
44		JP-03-653348 (Abstract)-*	Mar-20,-1991	-Matsushita Electric Ind Co		
-		EP 0 431 338	Jun 12, 1991	Matsushita Electric Ind Co		<u> </u>
_1		JP_01_257058 •	Oct 13, 1989	Seiko Epson Corp	\	
		DE 195 17 969 *	Nov 30, 1995	Sharp K.K		
		DE 196 39 717 *	Apr 17, 1997	Sharp K.K		i
		EP 0 737 580 *	Oct 16, 1996	Canon K.K		-
		EP-0-882-590-*	Dec-09,-1998	Ganon-K.K		
#1		EP-0.478.956.*	Apr 08, 1992	Kemforschungsz-Kartshrut	e.GMBH	<u> </u>
		DE_1_648_322 •	Mar 24_1971	VDO_Tachometerwerke GI		
4		GB 1 428 239 *	Mar 17, 1976	Cibie Projecteurs		

Examiner Signature Considered

EXAMINER: Initial/if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in

^{2.} Aminter: intustri reference considered, whether or not citation is not chatton to applicant.

1 Applicant's unique citation designation number (optional).

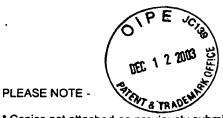
2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04.

3 Enter Office that Issued the document, by the two-letter code (WIPO Standard ST.3).

4 For Japanese patent documents, the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible.

5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible.

6 Applicant is to place a check mark here if English language Translation is attached.



PTO/SB/08A (10-01)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE

Application Number

Filing Date

INFORMATION DISCLOSURE

STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 4 of 7 Attorney Docket Number MTB07US

		U.S. PATE	NT DOCUMENTS	
Examiner Initials	Document Number Number - Kind Code ² (if known	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	US-			
	 US-			
	US-			·
	US-			
	US→			
	US-			The second secon
	US-			
	US-			
	 us-			

		FORI	EIGN PATENT D	OCUMENTS		
Examiner	Cite	Foreign Patent Document	Publication Date	Name of Patentee or	Pages, Columns, Lines,	
Initials	No.1	Country Code 3 -Number 4 - Kind Code 5 (if known)		Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	T6
>		DE 39 34 280 *	Apr 26, 1990	CAE di Cipelletti Alberto		Г
VOV.	/	DE 29 05 063 ·	Aug 14, 1980	Olympia Werke AG		
71.14	<u> </u>	-WO-94-18010-*	- Aug18,1994	Domino Printing Sciences	PLC -	!
		EP 0 398 031 *	Nov 22, 1990	Seiko Epson Corp	l	
		EP 0 427 291 *	May 15, 1991	Seiko Epson Corp	1	
		JP 01 115639 (Abstract) *	May 08, 1989	Ricoh Co Ltd		i
		JP 58 116165 (Abstract) *	Jül 11, 1983	Canon K.K		i—
		EP-0-627-314-*	-Dec 07-1994	Olivetti Canon Ind SPA		!—
		-JP-61-268453 (Abstract).*	-Nov-27,-1986	Olympus Optical Co Ltd		<u> </u>
		JP_04_118241 (Abstract) *	Apr 20, 1992	Seiko Epson Corp		$ \sum$
10		EP 0 506 232 *	Sep 30, 1992	Videojet Systems Int, Inc		1
		JP 07 314665 (Abstract) *	Dec 05, 1995	Canon Inc		i—

Examiner Signature Date Considered 2/28/00

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's uniqué citation designation number (options). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁸ Applicant is to place a check mark here if English language Translation is attached.



PLEASE NOTE -

Copies not attached as previously submitted to or cited by the USPTO in parent applications US 10/160,273

PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Tradsmark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. Complete if Known Substitute for form 1449A/PTO **Application Number** INFORMATION DISCLOSURE Filing Date STATEMENT BY APPLICANT **First Named Inventor** Kia Silverbrook

Art Unit

(use as many sheets as necessary) Examiner Name of Attorney Docket Number MTB07US Sheet

	 	U.S. PATE	ENT DOCUMENTS	
Examiner Initials	Document Number Number - Kind Code ² (If known	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	 US-			
	US-			
	 US-			
	US-			
	US-			
	 US-			
	us-			
	US-			
	 US-			

		FOR	EIGN PATENT	OCUMENTS		_
Examiner	Cita	Foreign Patent Document		Name of Patentee or	Pages, Columns, Lines,	
	No.1	Country Code 3 -Number 4 - Kind Code 3 (F known)	Publication Date MM-DD-YYYY	Applicant of Cited Document	Where Relevant Pessages or Relevant Figures Appear	⊤®
		JP 03 180350 *	Aug 06, 1991	Seiko Epson Corp		
MIL	h	WO 97 12689 *	Apr 10, 1997	The Board of Trustees of the	e Leland	ĺ
XI PU	-	10.00.000000000000000000000000000000000		Stanford-University		i
1 			Feb 20,-1990	Seiko Epson Corp		
!	!	EP 0 510 648 *	Oct 28, 1992	llyri Yehuda		<u> </u>
1		JP 05 28765 (Abstract) *	Oct 29, 1993	Canon Inc	l \	ı
	i ——	JP 04 141429 (Abstract) *	May 14, 1992	Seiko Epson Corp		
		JP 01 105746 (Abstract) ************************************	Apr 24, 1989	Ricoh Co. Ltd		i
₫	! -	GB-792-145-*	Mar-19-1958	Technograph-Printed-Circu	ts-t-td	!
_4	<u> </u>	EP-0.750.993 *	Jan.02,-1997	Canon K.K.		
			Dec 11, 1989	Seiko Epson Corp		Ĭ
4	i	EP 0 092 229 *	Oct 26, 1983	Siemens AG		

Examiner Signature Considered

^{*}EXAMINER: Initial if eference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not donsidered. Include copy of this form with next communication to applicant.

1 Applicant's unique ditation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 8 Applicant is to place a check mark here if English language Translation is attached.



PTO/SB/08A (10-01)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB

Substitut	e for form 1449A/F	то		Со	mplete if Known	
11150				Application Number		
INFO	RMATIO	אוט א	CLOSURE	Filing Date		
STA	TEMENT !	BY A	PPLICANT	First Named Inventor	Kia Silverbrook	
				Art Unit		
(use as many sh	eers as	necessary)	Examiner Name		
Sheet	6	of	7	Attorney Docket Number	MTB07US	

		U.S. PATE	NT DOCUMENTS	
Examiner Initials	_Document Number Number - Kind Code ² (if known	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	 US-			
	us-			
	 US-			_
	 US-			
	 US-			
	US-			
	US			
	us-			
[US-			
	US-			
	 US-			
	US-			
	US-			
	 US-			
	 US-			

		FORE	IGN PATENT D	OCUMENTS		
Examiner Initials	Cite No. 1	Foreign Patent Document Country Code 3 - Number 4 - Kind Code 9 (# Innovers)	Publication Date MM-DD-YYYY	Name of Patentae or Applicant of Cited Document	Pagas, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
SC V		DE 37 16 996 *	Dec 08, 1988	VDO Schindling		Г
117		DE 34 30 155 •	Feb 27, 1986	Siemens AG		i
		FR-2-231-076	-Dec-20-1974	Electricite-De-France		i
₩.		GB 2.007_162.*	_May_1979			┝
			······································			
	i					
	i					i
	i			ii		-
						i
				·		!

Examiner Signature Considered

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 6 Applicant is to place a check mark here if English tanguage Translation is attached.



Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO	Complete if Known
INFORMATION DISCLOSURE	Application Number
INFORMATION DISCLOSURE	Filing Date
STATEMENT BY APPLICANT	First Named Inventor Kia Silverbrook
O'ALLINERI DI ALI EIOARI	Group Art Unit
(use as many sheets as necessary)	Examiner Name
Sheet 7 of 7	Attorney Docket Number MTB07US

		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No. 1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue oumber(s), oublisher, city and/or country where published	T2
ans		NOWOROLSKI, J. MARK et al, "Process for in-plane and out-of-plane single-crystal-silicon thermal microactuators". Sensors and Actuators, A, CH, Elsevier-Sequoia-S-A., Lausanne, Vol-55, no1, 15-July-1996, pp-65-69, XP004077979 ISSN: 0924-4247.	
		ATAKA, MANABU et al, "Fabrication and Operation of Polymide Bimorph Actuators for Ciliary Motion System". Journal of Microelectromechanical Systems, US, IEEE Inc. New York, Vol. 2, no. 4, 1 December 1993, pp 146-150, XP000443412, ISSN: 1057-7157.	
4		YAMAGATA, YUTAKA et al, "A Micro Mobile Mechanism Using Thermal Expansion and its Theoretical Analysis". Proceedeing of the workshop on micro electro mechanical systems (MEMS), US, New York, IEEE, Vol. Workshop 7, 25 January-1994, pp-142-147, XP000528408, ISBN:-0-7803-1834-X.	

Signature Considered 2026

*EXAMINER: Initial if refere ce considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.